

**Beschied/Protokoll (Anlage)**Datum
Date 16.08.2006**Communication/Minutes (Annex)**Blatt
Sheet 1
Feuille**Notification/Procès-verbal (Annexe)**Anmelde-Nr.:
Application No.: 04 706 615.4
Demande n°:

The examination is being carried out on the **following application documents:**

Description, Pages

1-57 as published

Sequence listings part of the description, Pages

1-20 as published

Claims, Numbers

1-34 as annexed to the Int. Prel. Examination Report

Drawings, Sheets

1/17-17/17 as published

1. LACK OF UNITY (Art. 82 EPC)

- 1.1 Following an invitation to lack of unity and an invitation according to Rule 112 EPC for further searches, the applicant submitted arguments on the question of non-unity.
- 1.2 The applicant argues that the prior art only discloses survivin peptides restricted to HLA-A2, but the claims are not limited to this, nor to HLA-B or HLA-C. Since the epitope peptides are not present in the main claim, the general concept of the present set of claims is not regarded inventive. The concept of combining multiple survivin-derived peptides in compositions to target different HLA alleles is obvious to



a skilled person in the field. It is also obvious that different peptides should target different HLA molecules. Thus, the non-unity objection is maintained for the reasons already given in the communication according to Rule 112 EPC.

- 1.3 In accordance with **Rule 112 EPC**, the applicant paid a European search fee for **invention 58** (SEQ ID NO: 58, RISTFKNWPK). A supplementary search was performed for such subject-matter and the corresponding European Search Report is attached to this communication.
- 1.4 The applicant is now required to indicate on which invention (invention 1 or 58) he wishes further prosecution of the application to be based, and to limit the application accordingly. The applicant should excise those parts of the application relating to the other inventions.
- 1.5 The subject-matter to be excised may be made the subject of one or more divisional applications. The divisional applications must be filed directly at the European Patent Office in Munich or its branch at The Hague and in the language of the proceedings relating to the present application, cf. Article 76(1) and Rule 4 EPC. The time limit for filing divisional applications (Rule 25(1) EPC) must be observed.

2. AMENDMENTS

- 2.1 The arguments of the applicant in the letter of 26.06.2006 concerning the allowableness of the amendments on file upon entry into the European phase according to **Art. 123(2) EPC**, can be accepted by the Examining Division.
- 2.2 However, said amendments contravene **Rule 86(4) EPC** since they still relate to unsearched subject-matter which does not combine with the **originally claimed invention** or groups of inventions to form a single general inventive concept.



European Patent
Office

EUROPEAN SEARCH REPORT under Rule 112 EPC

Application Number
EP 04 70 6615

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
	On request of the applicant the present search report has been drawn up for claims relating to inventions		INV. A61K38/17 A61P35/00 C07K14/47 C07K16/18 G01N33/574 G01N33/68
X	ANDERSEN MADIS HALD ET AL: "Identification of a cytotoxic T lymphocyte response to the apoptosis inhibitor protein survivin in cancer patients" CANCER RESEARCH, vol. 61, no. 3, 1 February 2001 (2001-02-01), pages 869-872, XP002283853 ISSN: 0008-5472 * the whole document *	1-7, 12-17, 20-50	
X	ANDERSEN MADIS HALD ET AL: "Spontaneous cytotoxic T-cell responses against survivin-derived MHC class I-restricted T-cell epitopes in situ as well as ex vivo in cancer patients" CANCER RESEARCH, vol. 61, no. 16, 15 August 2001 (2001-08-15), pages 5964-5968, XP002283854 ISSN: 0008-5472 * the whole document *	1-7, 12-17, 20-50	TECHNICAL FIELDS SEARCHED (IPC) A61K C07K
X	SCHMITZ MARC ET AL: "Generation of survivin-specific CD8+ T effector cells by dendritic cells pulsed with protein or selected peptides" CANCER RESEARCH, vol. 60, no. 17, 1 September 2000 (2000-09-01), pages 4845-4849, XP002283855 ISSN: 0008-5472 * the whole document *	1-7, 12-17, 20-50	

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EPC FORM 1508 (01.02.02) (P04024)

Place of search The Hague	Date of completion of the search 18 July 2006	Examiner Madruga, J
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons</p> <p>* : member of the same patent family, corresponding document</p>		



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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	HIROHASHI YOSHIHIKO ET AL: "An HLA-A24-restricted cytotoxic T lymphocyte epitope of a tumor-associated protein, survivin." CLINICAL CANCER RESEARCH : AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH. JUN 2002, vol. 8, no. 6, June 2002 (2002-06), pages 1731-1739, XP002283856 ISSN: 1078-0432 * the whole document *	1-6, 12-17, 21-50	
X	DATABASE BIOSIS [Online] BIOSCIENCES INFORMATION SERVICE, PHILADELPHIA, PA, US; 16 November 2002 (2002-11-16), SCHMIDT SUSANNE M ET AL: "Survivin Is a Shared Tumor-Associated Antigen Expressed in a Broad Variety of Malignancies and Recognized by Specific Cytotoxic T-Cells." XP002283859 Database accession no. PREV200300357946 * abstract * & BLOOD, vol. 100, no. 11, 16 November 2002 (2002-11-16), page Abstract No. 3675, 44TH ANNUAL MEETING OF THE AMERICAN SOCIETY OF HEMATOLOGY; PHILADELPHIA, PA, USA; DECEMBER 06-10, 2002 ISSN: 0006-4971 ----- -/-	1-6, 12-17, 21-50	
			TECHNICAL FIELDS SEARCHED (IPC)
Place of search The Hague		Date of completion of the search 18 July 2006	Examiner Madruga, J
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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EPO FORM 1533 (3.12.02) (P/4C/24)



European Patent
Office

EUROPEAN SEARCH REPORT under Rule 112 EPC

Application Number
EP 04 70 6615

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	FORTUGNO PAOLA ET AL: "Survivin exists in immunochemically distinct subcellular pools and is involved in spindle microtubule function" JOURNAL OF CELL SCIENCE, vol. 115, no. 3, 1 February 2002 (2002-02-01), pages 575-585, XP002283857 ISSN: 0021-9533 * page 577, right-hand column, paragraph 4 - page 578, left-hand column, paragraph 1 *	42,43	
A	WO 00/03693 A (JENNER BIOTHERAPIES INC) 27 January 2000 (2000-01-27) * page 2, line 25 - page 3, line 30 * * page 5, line 3 - page 6, line 21 * * page 9, line 1 - line 20; claims *		
A,D	US 6 245 523 B1 (ALTIERI DARIO C) 12 June 2001 (2001-06-12) * the whole document *		TECHNICAL FIELDS SEARCHED (IPC)
P,X	WO 03/102023 A (IMMATICS BIOTECHNOLOGIES GMBH ; STEVANOVIC STEFAN (DE); WEINSCHENK TON) 11 December 2003 (2003-12-11) * page 25 - page 34; sequence 80 *	1-7, 12-17, 20-50	
P,X	SCHMIDT SUSANNE M ET AL: "Survivin is a shared tumor-associated antigen expressed in a broad variety of malignancies and recognized by specific cytotoxic T cells." BLOOD, vol. 102, no. 2, 15 July 2003 (2003-07-15), pages 571-576, XP002283858 ISSN: 0006-4971 * the whole document *	1-6, 12-17, 21-50	
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Place of search		Date of completion of the search	Examiner
The Hague		18 July 2006	Madruga, J
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EPF FORM 1503 (12-02) (IP/C&A)



DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
E	WO 2005/049073 A (KRAEFTENS BEKAEMPELSE; STRATEN, EIVIND, PER, THOR; ANDERSEN, MAD, HA) 2 June 2005 (2005-06-02) For invention 58.* claims; sequence 25 *	1-34	
X	US 6 346 389 B1 (ALTIERI DARIO C) 12 February 2002 (2002-02-12) For invention 58.* claims; sequence 15 *	1-3, 6, 8, 11, 12, 14-18, 20, 26-34	
A	DATABASE EMBL 30 May 2000 (2000-05-30), "Baculoviral IAP repeat-containing protein 5 (Apoptosis inhibitor survivin) (Apoptosis inhibitor 4) (TIAP)." XP002392545 retrieved from EBI Database accession no. 070201 For invention 58. * abstract * - & CONWAY EDWARD M ET AL: "Three differentially expressed survivin cDNA variants encode proteins with distinct antiapoptotic functions" BLOOD, W.B. SAUNDERS COMPANY, ORLANDO, FL, US, vol. 95, no. 4, 15 February 2000 (2000-02-15), pages 1435-1442, XP002251969 ISSN: 0006-4971 - & MUCHMORE STEVEN W ET AL: "Crystal structure and mutagenic analysis of the inhibitor-of-apoptosis protein survivin" MOLECULAR CELL, CELL PRESS, CAMBRIDGE, MA, US, vol. 6, no. 1, July 2000 (2000-07), pages 173-182, XP002201891 ISSN: 1097-2765 ----- -/--		
<p>7</p> <p>Place of search The Hague</p> <p>Date of completion of the search 18 July 2006</p> <p>Examiner Madruga, J</p>			
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons * : member of the same patent family, corresponding document</p>			



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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
T	REKER SINE ET AL: "Identification of novel survivin-derived CTL epitopes." CANCER BIOLOGY & THERAPY, FEB 2004, vol. 3, no. 2, February 2004 (2004-02), pages 173-179, XP008066706 ISSN: 1538-4047 For invention 58 * the whole document *		
T	EMENS L A: "Survivin' cancer" CANCER BIOLOGY AND THERAPY 2004 UNITED STATES, vol. 3, no. 2, 2004, pages 180-183, XP008066705 ISSN: 1538-4047 For invention 58 * the whole document *		
T	REKER SINE ET AL: "Inhibitors of apoptosis (IAP) as targets for spontaneous T-cell responses in cancer patients: Potential universal antigens in therapeutic vaccinations against cancer" JOURNAL OF IMMUNOTHERAPY, vol. 27, no. 6, November 2004 (2004-11), pages S29-S30, XP00806670 & 19TH ANNUAL SCIENTIFIC MEETING OF THE INTERNATIONAL-SOCIETY-FOR-BIOLOGICAL-THERAPY-OF-CANCER; SAN FRANCISCO, CA, USA; NOVEMBER 04 -07, 2004 ISSN: 1524-9557 For invention 58 * the whole document *		TECHNICAL FIELDS SEARCHED (IPC)
Place of search		Date of completion of the search	Examiner
The Hague		18 July 2006	Madruga, J
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document</p> <p>T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons &: member of the same patent family, corresponding document</p>			

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EPC FORM 1503 (02.02) (IPACSA)

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 04 70 6615

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

18-07-2006

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